

CLAIMS

1. An apparatus for folding sheets, comprising:
a first crease roll, disposed on a first axle;
a second crease roll, disposed on a second axle;
the first crease roll and second crease roll being arranged to form a nip therebetween;
a first drive member disposed on the first axle;
a second drive member disposed on the second axle, engaging the first drive member; and
a slip element operatively disposed between the second drive member and the second axle.
2. The apparatus of claim 1, further comprising a movable blade for pushing at least one sheet through the nip, thereby folding the sheet.
3. The apparatus of claim 1, wherein the first drive member is a first gear and the second drive member is a second gear engaging the first gear.
4. The apparatus of claim 1, wherein the slip element is a slip clutch.
5. The apparatus of claim 1, wherein the slip clutch includes a Belleville washer.

6. A method of operating an apparatus including a first roll and a second roll arranged to form a nip therebetween, comprising:

transmitting a torque from the first roll to the second roll;
urging at least one sheet through the nip, thereby folding the sheet; and
limiting the transmitted torque as a result of an effective change in frictional coefficient between the first roll and the second roll.

7. The method of claim 6, further comprising
providing a first drive member associated with the first roll and a second drive member associated with the second roll, the second drive member engaging the first drive member.

8. The method of claim 7, wherein the first drive member is a first gear and the second drive member is a second gear engaging the first gear.

9. The method of claim 7, the limiting step including permitting a slip between the second drive member and the second roll.

10. The method of claim 7, the limiting step including permitting a slip between the first drive member and the first roll.

11. The method of claim 6, further comprising
urging a plurality of sheets through the nip simultaneously, thereby folding the sheets.

12. The method of claim 6, further comprising
advancing a blade to urge the at least one sheet through the nip.